SPYWOLF

Security Audit Report

HYDRAPER

Completed on
December 2, 2022

MADE IN USA 🇺🇸

OVERVIEW

This audit has been prepared for **Hydraper** to review the main aspects of the project to help investors make make an informative decision during their research process.

You will find a a summarized review of the following key points:

- ✔ Contract's source code
- ✔ Owners' wallets
- ✔ Tokenomics
- ✔ Team transparency and goals
- ✔ Website's age, code, security and UX
- ✔ Whitepaper and roadmap
- ✔ Social media & online presence

"The results of this audit are purely based on the team's evaluation and does not guarantee nor reflect the projects outcome and goal

– SPYWOLF Team –

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Hydraper

HYDRAPER

PROJECT DESCRIPTION

According to their whitepaper:

Hydraper is a new Defi protocol that seeks to simplify Defi for the public while also making blockchain more approachable and easier to use in the long term.

This is accomplished through a single product ecosystem created on the Binance Smart Chain, which includes, but is not limited to: Hydraper Wallet, Hydraper Dapps, Hydraper Staking, NFT Mart, Hydraper Starter.

Release Date: Presale starts in December, 2022
Category: DEX

CONTRACT INFO

Token Name
HydraperFinance

Symbol
HYF

Contract Address
0xcfa022ae379253D9f4D3522b7cD597E0fd108552

Network
Binance Smart Chain

Language
Solidity

Deployment Date
Nov 30, 2022

Verified?
Yes

Total Supply
100,000,000

Status
Not launched

TAXES

Buy Tax
3%

Sell Tax
3%

*Taxes can be changed in future

Our Contract Review Process

The contract review process pays special attention to the following:

- ✓ Testing the smart contracts against both common and uncommon vulnerabilities
- ✓ Assessing the codebase to ensure compliance with current best practices and industry standards.
- ✓ Ensuring contract logic meets the specifications and intentions of the client.
- ✓ Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- ✓ Thorough line-by-line manual review of the entire codebase by industry experts.

Blockchain security tools used:

- OpenZeppelin
- Mythril
- Solidity Compiler
- Hardhat

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CURRENT STATS

(As of December 01, 2022)

Liquidity

Not added yet

Burn

No burnt tokens

Status:
Not Launched!

MaxTxAmount
500,000,000,000,000,000,000,000

DEX
PancakeSwap

LP Address(es)

Liquidity not added yet

TOKEN TRANSFERS STATS

Transfer Count	TESTNET
Uniq Senders	TESTNET
Uniq Receivers	TESTNET
Total Amount	TESTNET
Median Transfer Amount	TESTNET
Average Transfer Amount	TESTNET
First transfer date	TESTNET
Last transfer date	TESTNET
Days token transferred	TESTNET

SMART CONTRACT STATS

Calls Count	TESTNET
External calls	TESTNET
Internal calls	TESTNET
Transactions count	TESTNET
Uniq Callers	TESTNET
Days contract called	TESTNET
Last transaction time	TESTNET
Created	TESTNET
Create TX	TESTNET
Creator	TESTNET

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FEATURED WALLETS

Owner address	0xde87187715c6e771506d2d2c7ee65949beaffc0c
Dev wallet	0xde87187715c6e771506d2d2c7ee65949beaffc0c
LP address	**Liquidity not added yet**

TOP 3 UNLOCKED WALLETS

1
N/A   TESTNET

TESTNET   N/A   2

3
N/A   TESTNET

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SPYWOLF.CO
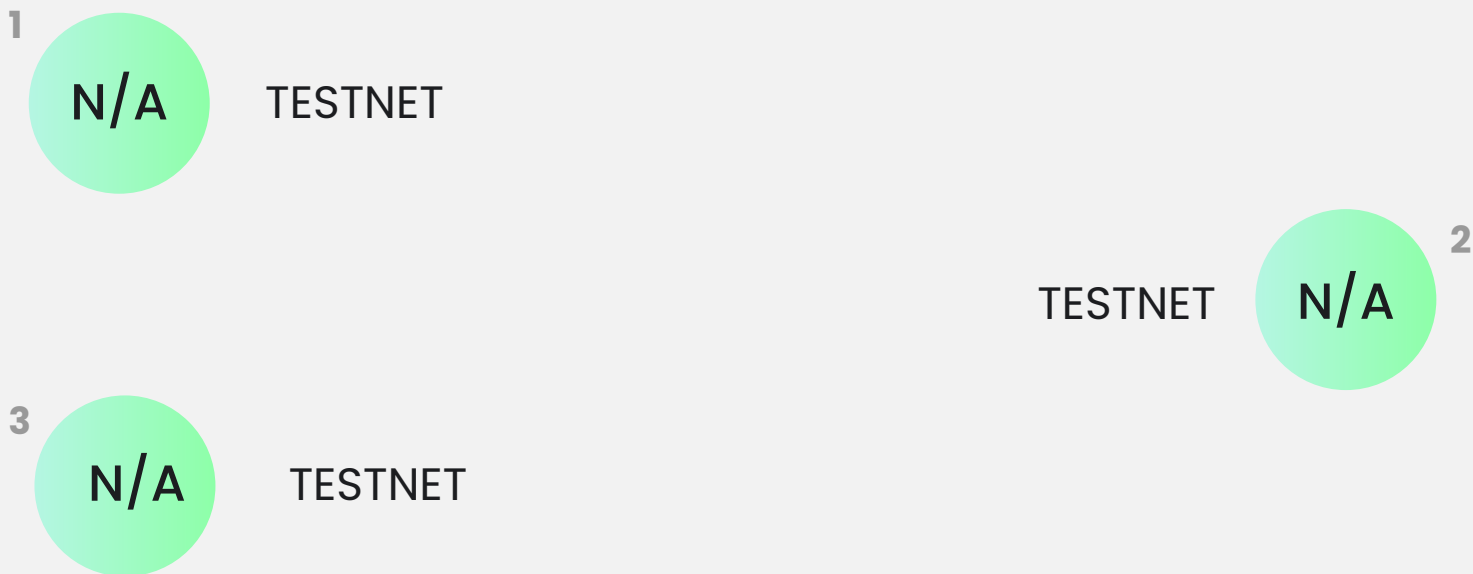
FEATURED WALLETS

Owner address	TESTNET
Charity Address	TESTNET
LP address	TESTNET

PRESALE STATS (Pinksale)

https://www.pinksale.finance/launchpad/0x83A5eaB2CAF654Ea0b0A3e786fB0a2422260a847

Total Supply	TESTNET
Tokens For Presale	TESTNET
Tokens For Liquidity	TESTNET
Soft Cap	TESTNET
Presale Start Time	TESTNET
Presale End Time	TESTNET
Listing On	TESTNET
Liquidity Percent	TESTNET
Liquidity Lockup Time	TESTNET

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VULNERABILITY CHECK

Design Logic	Passed
Compiler warnings.	Passed
Private user data leaks	Passed
Timestamp dependence	Passed
Integer overflow and underflow	Passed
Race conditions and reentrancy. Cross-function race conditions	Passed
Possible delays in data delivery	Passed
Oracle calls	Passed
Front running	Passed
DoS with Revert	Passed
DoS with block gas limit	Passed
Methods execution permissions	Passed
Economy model	Passed
Impact of the exchange rate on the logic	Passed
Malicious Event log	Passed
Scoping and declarations	Passed
Uninitialized storage pointers	Passed
Arithmetic accuracy	Passed
Cross-function race conditions	Passed
Safe Zeppelin module	Passed
Fallback function security	Passed

THREAT LEVELS

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and access control issues within the code. The exploitation of these issues by malicious actors may cause serious financial damage to projects that failed to get an audit in time. We categorize these vulnerabilities by the following levels:

High Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Medium Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Low Risk

Issues on this level are minor details and warning that can remain unfixed.

Informational

Information level is to offer suggestions for improvement of efficacy or security for features with a risk free factor.

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FOUND THREATS

⚠️ High Risk

Owner can set max transaction limit, if set to 1 token it can be considered as impossible to sell, because price of 1 token might be less than the fees associated with the transaction.

```solidity
function setMaxTxPercent(uint256 maxTxPercent) public onlyOwner {
    require(maxTxPercent > 0, "Invalid Tx Percent");
    _maxTxAmount = maxTxPercent * 10**_decimals;
}
```

- Recommendation:
  - Considered as good practice is to be impossible for max transaction limit to be below 0.1% of total supply.

08-A

FOUND THREATS

⚠️ High Risk

Owner can set buy/sell fees up to 15%.
Combined buy+sell=30%.

```solidity
function setTaxFeePercent(uint256 taxFee) external onlyOwner {
    require(taxFee >= 0 && taxFee <= 5, "Invalid tax fee");
    _taxFee = taxFee;
}

function setDevFeePercent(uint256 devFee) external onlyOwner {
    require(devFee >= 0 && devFee <= 5, "Invalid tax fee");
    _devFee = devFee;
}

function setLiquidityFeePercent(uint256 liquidityFee) external onlyOwner {
    require(liquidityFee >= 0 && liquidityFee <= 5, "Invalid tax fee");
    _liquidityFee = liquidityFee;
}
```

- Recommendation:
  - Considered as good tax deduction practice is buy and sell fees combined not to exceed 25%.

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ℹ️ Informational

Owner can exclude address from fees.

```solidity
function excludeFromFee(address account) public onlyOwner {
    _isExcludedFromFee[account] = true;
}
```

Owner can exclude address from rewards.

```solidity
function excludeFromReward(address account) public onlyOwner {
    require(!_isExcluded[account], "Account is already excluded");
    if (_rOwned[account] > 0) {
        _tOwned[account] = tokenFromReflection(_rOwned[account]);
    }
    _isExcluded[account] = true;
    _excluded.push(account);
}
```

08-C

RECOMMENDATIONS FOR
GOOD
PRACTICES

1 Consider fundamental tradeoffs

2 Be attentive to blockchain properties

3 Ensure careful rollouts

4 Keep contracts simple

5 Stay up to date and track development

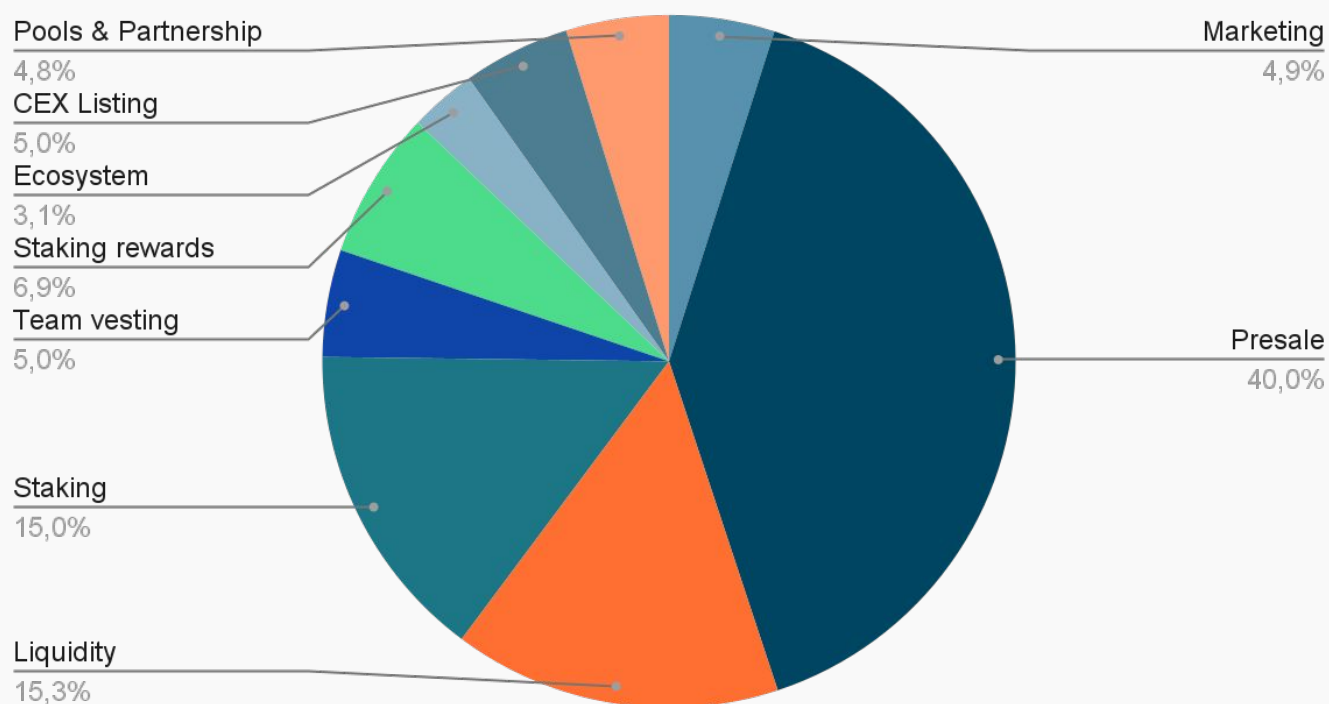## Hydraper

GOOD PRACTICES FOUND

✔ The owner cannot mint new tokens after deployment

✔ The smart contract utilizes "SafeMath" to prevent overflows

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The following tokenomics are based on the project's whitepaper and/or website:

- 40% - Presale
- 15.28% - Liquidity
- 4.92% - Marketing
- 5% - Team vesting
- 15% - Staking

- 6.89% - Staking rewards
- 3.11% - Ecosystem
- 5% - CEX Listing
- 4.8% - Pools & Partnership

Tokens distribution

- Pools & Partnership 4,8%
- CEX Listing 5,0%
- Ecosystem 3,1%
- Staking rewards 6,9%
- Team vesting 5,0%
- Staking 15,0%
- Liquidity 15,3%
- Marketing 4,9%
- Presale 40,0%

THE TEAM

The team has privately doxxed to PINKSALE

https://pinksale.notion.site/Hydraper-Finance-KYC-Verification-f66bf80ac17d47b8a2abb9dde5bb031c

Hydraper Finance - KYC Verification

This KYC page verifies that One Member of the project has successfully completed the verification process at PinKSale. Project info:

- Project Name: Hydraper Finance
- Project Website: https://hydraper.finance/
- KYC Issued: November 29, 2022

Disclaimer

A project receiving the KYC badge does not mean in any way that we approve or recommend that project, even if we host an AMA with them. Please always DYOR before investing, remembering that PinkSale is a decentralized platform.

Website URL
https://hydraper.finance/
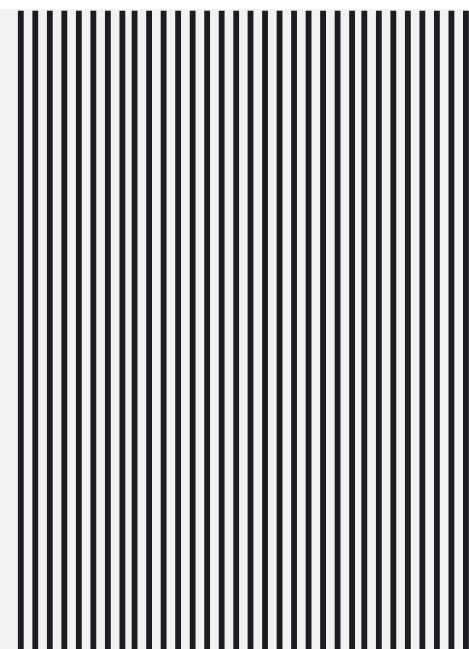
Domain Registry
https://www.namecheap.com/

Domain Expiration
Expires on 2023-11-02

Technical SEO Test
Passed

Security Test
Passed. SSL certificate present

Design
Very nice design, color scheme and overall layout.

Content
The information helps new investors understand what the product does right away. No grammar mistakes found.
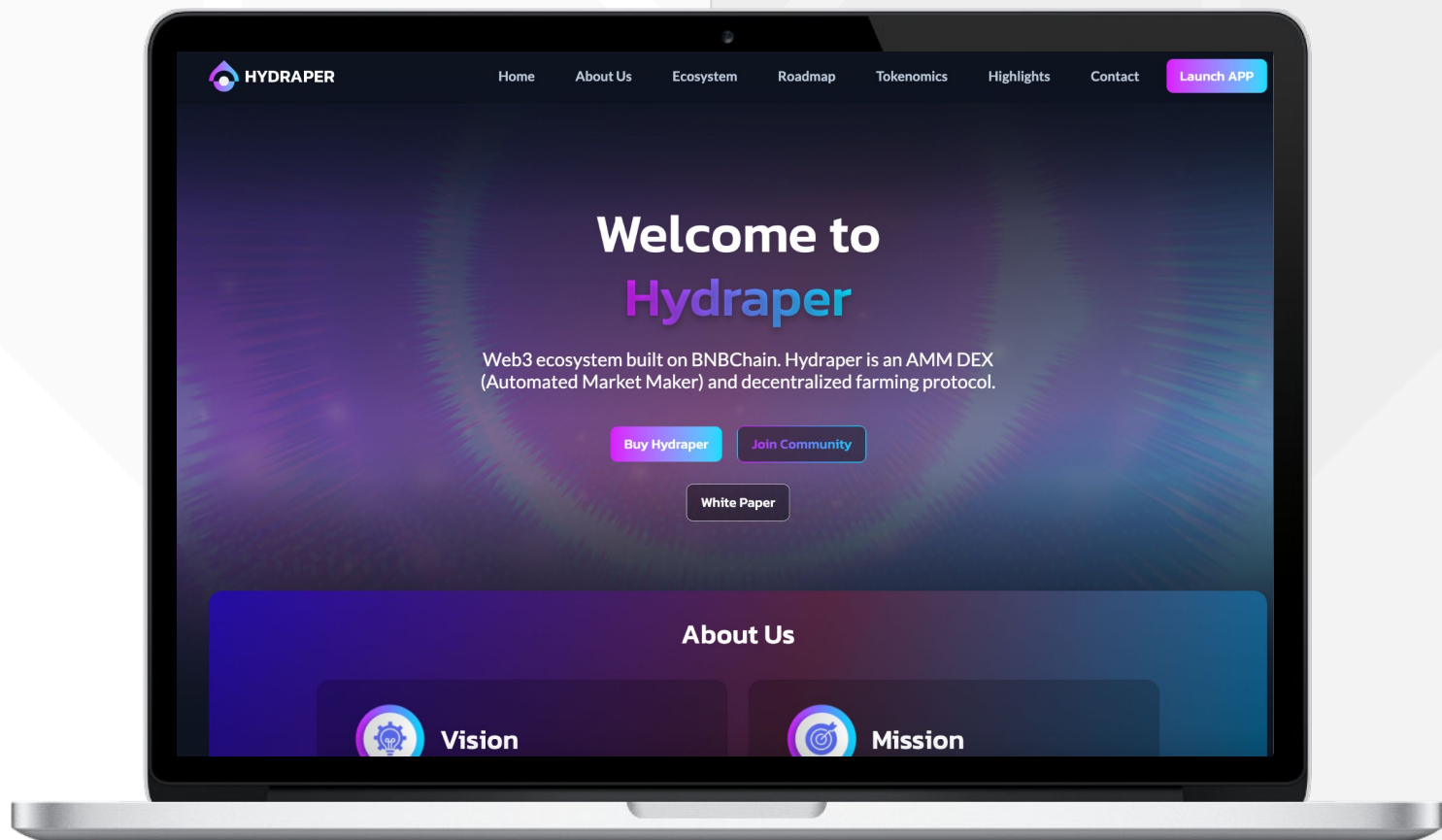⚠️ Fake LinkedIn profiles in team section.

Whitepaper
Well written, explanatory.

Roadmap
Yes, goals set at 3 phases without time frames.
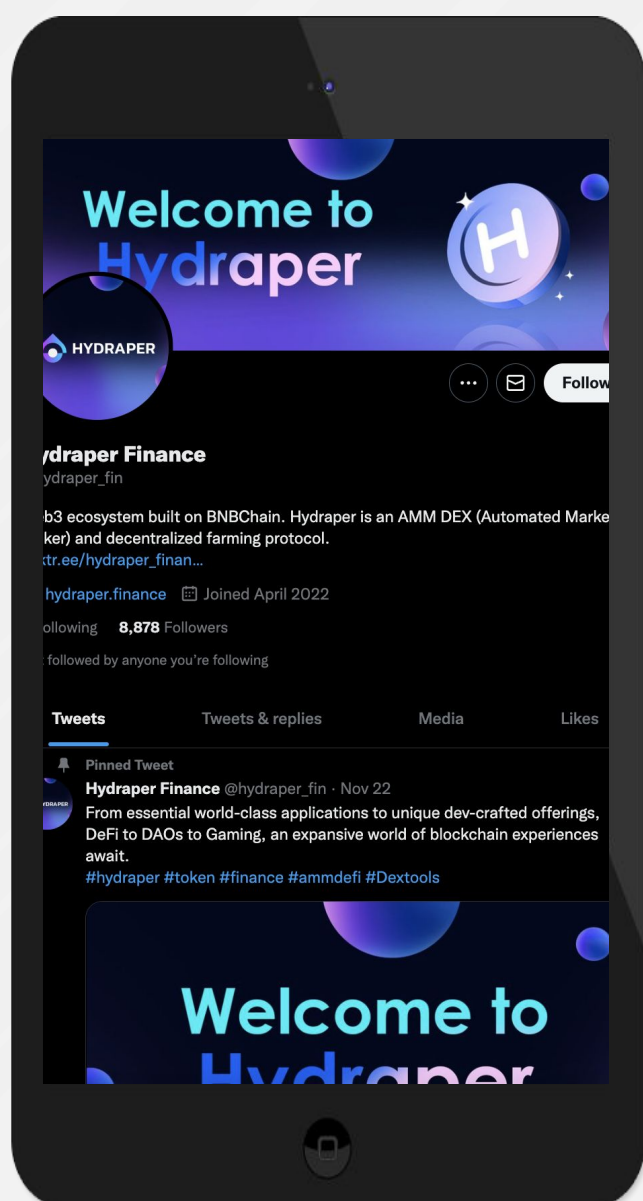
Mobile-friendly?
Yes

hydraper.finance
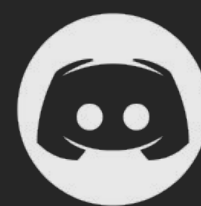
SOCIAL MEDIA
& ONLINE PRESENCE

⚠️ Project's social media channels are botted with little to no responses from organic members

Twitter
@hydraper_fin

- 8 869 followers, botted ⚠️
- Simulated 'human' activity from members ⚠️
- Posts frequently

Discord

- Not available

Telegram
@hydraper_fin

- 542 members
- Announcements channel
- No chat ⚠️

Medium

- Not available

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SPYWOLF

CRYPTO SECURITY

Audits | KYCs | dApps
Contract Development

ABOUT US

We are a growing crypto security agency offering audits, KYCs and consulting services for some of the top names in the crypto industry.

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- ✔ **MORE THAN 500 SCAMS EXPOSED**

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To hire us, reach out to contact@spywolf.co or t.me/joe_SpyWolf

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Disclaimer

This report shows findings based on our limited project analysis, following good industry practice from the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, overall social media and website presence and team transparency details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report.

While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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No applications were reviewed for security. No product code has been reviewed.